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| 09/368,469      | 08/04/1999  | MASANORI NAKAHARA    | 1232-4554           | 5581             |

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EXAMINER

HENN, TIMOTHY J

| ART UNIT | PAPER NUMBER |
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2612

DATE MAILED: 03/24/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/368,469

Applicant(s)

NAKAHARA, MASANORI

Examiner

Timothy J Henn

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 18-22, 24-26, 35-39, 41, 46-50, 52-54, 63 and 64 is/are rejected.
- 7) ☒ Claim(s) 6, 10-17, 23, 27-34, 40, 42-45, 51 and 55-62 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. Objections to the specification have been overcome by amendment in paper number 6, filed on January 9, 2004. Therefore, these objections have been withdrawn.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-5, 7-9, 18-22, 24-26, 35-39, 41, 46-50, 52-54 and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono (US 6,133,941) in view of Donahue et al. (US 5,835,721) in further view of Odagaski (JP 09098317A).

#### **[claim 1]**

4. In regard to claim 1, note that Ono discloses an image distribution system comprising: an image sensing apparatus controllable by an external device, an imager transmission apparatus having a function of digitizing and transmitting an image signal acquired by an image sensing apparatus via a network and a function of issuing authorization to control said image sensing apparatus, an image reception apparatus which receives and displays the transmitted digitized image signal and requests to control an image sensing apparatus, and a network connecting said image transmission apparatus and said image reception apparatus. Therefore it can be seen that Ono lacks an image distribution system wherein, in a case where an image transmission apparatus issues the authorization to the image reception apparatus to control an

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sensing apparatus to an image reception apparatus and communication between an image reception apparatus and an image transmission apparatus is undesirably terminated while an image reception apparatus holds the authorization, after restoring the communication within a predetermined period, conditions of the image sensing apparatus are restored to conditions at the time of the undesired termination, and the image reception apparatus is allowed to continuously control said image sensing apparatus under the same conditions as at the time of the undesired termination.

5. Donahue et al. teaches a method of data transmission over a network with the ability to withstand temporary interruptions. In the system of Donahue et al. if a connection between two computers is dropped, and the connection is reestablished within a predetermined period of time, the transfer of data will continue from the point at which the connection was dropped (Column 10, Lines 46-57). This allows the creation of a logical connection, which will remain active even if the underlying physical connection is dropped and allow for fault tolerant communication between two systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the fault tolerant connection system of Donahue et al. with the image distribution system of Ono to allow Ono's image distributions system to have the ability to withstand temporary interruptions. It can further be seen that Ono in view of Donahue et al. lacks a system which restores the conditions of the image sensing apparatus to the conditions at the time of the undesired communication after restoring the communication within a predetermined time period.

6. Odagaki discloses a camera system which stores previous camera positions (Paragraph 0004) to allow an easy way to return to previous angles of view without relying on the operators memory (Paragraph 0003). The camera of Odagaki is set to return to a previous position based upon the inputting of a control signal (Paragraph 0004). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the image sensing device restoring system of Odagaki with the image distribution and fault tolerant communication system of Ono in view of Donahue et al. to restore the image sensing apparatus' previous position after a connection is dropped and subsequently restored to allow the recreation of view of critical angles without relying on the operators memory to recreate the angle of view.

**[claim 2]**

7. In regard to claim 2, note that Ono discloses an image distribution system, which allows remote control of the pan/tilt/zoom of an image sensing apparatus (Column 4, Lines 13-30).

**[claim 3]**

8. In regard to claim 3, note that the image distribution system of Ono allows for verification of whether or not an image reception apparatus is allowed to control an image sensing apparatus (Column 5, Lines 15-32).

**[claim 4]**

9. In regard to claim 4, note that when the connection of Donahue et al. is restored the broken connection processing decision block (Figure 8; Column 9, Lines 25-55) will report the connection as being alive. Once this connection is reopened, the resending

of data can immediately continue (Figure 5B). This system in combination with the authorization and image distribution system of Ono creates an image distribution system wherein a image transmission apparatus which immediately issues authorization to control an image sensing apparatus when an image reception apparatus restores the communication within the predetermined period after the undesired termination of the communication is inherent.

**[claim 5]**

10. In regard to claim 5, note that Ono discloses an image distribution system with a queue for clients who are awaiting connections (Figure 3; Column 5, Lines 15-20). Also note that Ono discloses a method of determining whether a client who is requesting access already holds a spot in the queue (Figure 6A). Donahue et al. also discloses a queuing system in which if a connection is broken, the activity that was associated with that connection is then placed back into the queue. By combining the queuing system of Donahue et al. with the queue and method of determining whether the client who is requesting access already holds a spot in a queue of Ono, it would be inherent in the system that in a case where an image reception apparatus restores the communication after an undesired termination and another image reception apparatus holds authorization to control an image sensing apparatus at the time of the restoration of the communication, an image transmission apparatus would give priority to the restored image reception apparatus to receive the authorization to control said image sensing apparatus after the other image reception apparatus releases the authorization to control said image sensing apparatus, since upon reconnect, the restored image

sensing apparatus would return to its previous spot at the front of the queue. Therefore, it can be seen that the system of Ono in view of Donahue et al. in view of Odagaki lacks a predetermined time in which the image sensing apparatus must reconnect to be given its previous spot in the queue. However, it is known in the computer connection queue art, that if failed connections are allowed to remain in a queue indefinitely, then the queue would become unmanageably large, and to solve such a problem a maximum allowed time or "predetermined time" is set for failed connections to be allowed to remain in the queue (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement time limits on the time allowed for a failed connection to remain in the queue of Ono in view of Donahue et al. in view of Odagaki to avoid problems with unmanageably large queues.

**[claim 7]**

11. In regard to claim 7, note that Donahue et al. discloses a system to determine whether or not a receiver that is making a request for connection is the same receiver that was disconnected previously (Column 8, Lines 1-19; Column 9, Lines 25-55; Figure 8). Combining this feature of Donahue et al. with the authentication system of Ono makes for an image transmission apparatus which comprises administration means for, when a request for authorization to control said image sensing apparatus is received after the undesired termination, determining whether or not an image reception apparatus which requested the authorization is said image reception apparatus whose communication was undesirably terminated while holding the authorization is inherent.

**[claim 8]**

12. In regard to claim 8, note that Donahue et al. discloses a means for determining the identity of a connecting client which is based on a network address or "IP address" and a user name of the connecting client (Column 8, Lines 1-19).

**[claim 9]**

13. In regard to claim 9, note that Donahue et al. discloses a means for determining the identity of a connecting client which is based on a randomly assigned number or "key" issued by an image transmission apparatus. Therefore, it can be seen that Donahue et al. lacks a means for determining the identity of a connecting client, which is also based upon a password. However, it is commonly known in the computer authentication art that passwords can be used as a means to further help identify clients who access the computer systems, and to do so more securely (Official Notice). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a password to help identify a connecting client more securely.

**[claim 18]**

14. In regard to claim 18, note that Ono discloses a system which notifies users who are waiting to control the image sensing apparatus of the time until they will receive authorization to control the image sensing apparatus (Column 6, Lines 21-37).

**[claims 19, 20, 21, 22, 24, 25, 26 and 35]**

15. Claims 19, 20, 21, 22, 24, 25, 26 and 35 are method claims corresponding to the apparatus claims 1, 2, 3, 5, 7, 8, 9 and 18 respectively. Therefore, claims 19, 20, 21, 22, 24, 25, 26 and 35 are analyzed and rejected as previously discussed with respect to



claims 1, 2, 3, 5, 7, 8, 9 and 18.

**[claims 36, 37, 38, 39, 41 and 46]**

16. In regard to claims 36, 37, 38, 39, 41 and 46, note that the image transmission apparatus and image reception apparatus of Ono's image distribution system of claims 1, 3, 4, 5, 7 and 18 respectively are implemented as computer readable program code on a computer usable medium (Figures 2, 9) as claimed. Therefore, claims 36, 37, 38, 39, 41 and 46 are analyzed and rejected as previously discussed with respect to claims 1, 3, 4, 5, 7 and 18.

**[claim 47]**

17. In regard to claim 47, note that Ono discloses an image transmission apparatus, used in connection with an image sensing apparatus controllable by an external device, having a function of digitizing and transmitting an image signal acquired by said image sensing apparatus via a network and a function of issuing authorization to control said image sensing apparatus. Therefore it can be seen that Ono lacks an image distribution system wherein, in a case where an image transmission apparatus issues the authorization to control an sensing apparatus to an image reception apparatus and communication between an image reception apparatus and an image transmission apparatus is undesirably terminated while an image reception apparatus holds the authorization, after restoring the communication within a predetermined period, the image reception apparatus restores conditions of the image sensing apparatus to the conditions at the time of the undesired termination, and allows the external apparatus to continuously control said image sensing apparatus under the same restored conditions.

18. Donahue et al. teaches a method of data transmission over a network with the ability to withstand temporary interruptions. In the system of Donahue et al. if a connection between two computers is dropped, and the connection is reestablished within a predetermined period of time, the transfer of data will continue from the point at which the connection was dropped (Column 10, Lines 46-57). This allows the creation of a logical connection, which will remain active even if the underlying physical connection is dropped and allow for fault tolerant communication between two systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the fault tolerant connection system of Donahue et al. with the image sensing apparatus and image transmission apparatus of Ono to allow Ono's image sensing apparatus and image transmission apparatus to have the ability to withstand temporary interruptions. It can further be seen that Ono in view of Donahue et al. lacks an apparatus which restores the conditions of the image sensing apparatus to the conditions at the time of the undesired termination after restoring communication within a predetermined period.

19. Odagaki discloses a camera system which stores previous camera positions (Paragraph 0004) to allow an easy way to return to previous angles of view without relying on the operators memory (Paragraph 0003). The camera of Odagaki is set to return to a previous position based upon the inputting of a control signal (Paragraph 0004). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the image sensing device restoring system of Odagaki with the image distribution and fault tolerant communication system of Ono in

view of Donahue et al. to restore the image sensing apparatus' previous position after a connection is dropped and subsequently restored to allow the recreation of view of critical angles without relying on the operators memory to recreate the angle of view. In regard to claim 48, note that the image transmission apparatus of Ono allows for verification of whether or not an image reception apparatus is allowed to control an image sensing apparatus (Column 5, Lines 15-32).

**[claim 49]**

20. In regard to claim 49, note that when the connection of Donahue et al. is restored the broken connection processing decision block (Figure 8; Column 9, Lines 25-55) will report the connection as being alive. Once this connection is reopened, the resending of data can immediately continue (Figure 5B). This system in combination with the authorization and image transmission apparatus of Ono creates an image transmission apparatus, in which immediately issuing authorization to control an image sensing apparatus when an image reception apparatus restores the communication within the predetermined period after the undesired termination of the communication is inherent.

**[claim 50]**

21. In regard to claim 50, note that Ono discloses an image transmission apparatus with a queue for clients who are awaiting connections (Figure 3; Column 5, Lines 15-20). Also note that Ono discloses a method of determining whether a client who is requesting access already holds a spot in the queue (Figure 6A). Donahue et al. also discloses a queuing system in which if a connection is broken, the activity that was associated with that connection is then placed back into the queue. By combining the

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queuing system of Donahue et al. with the queue and method of determining whether the client who is requesting access already holds a spot in a queue of Ono, it would be inherent in the system that in a case where an image reception apparatus restores the communication after an undesired termination and another image reception apparatus holds authorization to control an image sensing apparatus at the time of the restoration of the communication, an image transmission apparatus would give priority to the restored image reception apparatus to receive the authorization to control said image sensing apparatus after the other image reception apparatus releases the authorization to control said image sensing apparatus, since upon reconnect, the restored image sensing apparatus would return to its previous spot at the front of the queue. Therefore, it can be seen that the system of Ono in view of Donahue et al. in view of Odagaki lacks a predetermined time in which the image sensing apparatus must reconnect to be given its previous spot in the queue. However, it is known in the computer connection queue art, that if failed connections are allowed to remain in a queue indefinitely, then the queue would become unmanageably large, and to solve such a problem a maximum allowed time or "predetermined time" is set for failed connections to be allowed to remain in the queue (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement time limits on the time allowed for a failed connection to remain in the queue of Ono in view of Donahue et al. in view of Odagaki to avoid problems with unmanageably large queues.

**[claim 52]**

22. In regard to claim 52, note that Donahue et al. discloses a system to determine whether or not a receiver that is making a request for connection is the same receiver that was disconnected previously (Column 8, Lines 1-19; Column 9, Lines 25-55; Figure 8). Combining this feature of Donahue et al. with the authentication system of Ono makes for an image transmission apparatus which comprises administration means for, when a request for authorization to control said image sensing apparatus is received after the undesired termination, determining whether or not an image reception apparatus which requested the authorization is said image reception apparatus whose communication was undesirably terminated while holding the authorization is inherent.

**[claim 53]**

23. In regard to claim 53, note that Donahue et al. discloses a means for determining the identity of a connecting client which is based on a network address or "IP address" and a user name of the connecting client (Column 8, Lines 1-19).

**[claim 54]**

24. In regard to claim 54, note that Donahue et al. discloses a means for determining the identity of a connecting client which is based on a randomly assigned number or "key" issued by an image transmission apparatus. Therefore, it can be seen that Donahue et al. lacks a means for determining the identity of a connecting client, which is also based upon a password. However, it is commonly known in the computer authentication art that passwords can be used as a means to further help identify clients who access the computer systems, and to do so more securely (Official Notice). It

would have been obvious to one of ordinary skill in the art at the time the invention was made to use a password to help identify a connecting client more securely.

**[claim 63]**

25. In regard to claim 63, note that Ono discloses a system which notifies users who are waiting to control the image sensing apparatus of the time until the will receive authorization to control the image sensing apparatus (Column 6, Lines 21-37).

**[claim 64]**

26. In regard to claim 64, note that Ono discloses a separate camera transmission apparatus and image sensing apparatus. However, it is well known in the art that combining devices together can help to simplify installation and removal of said devices (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the image transmission apparatus and image sensing apparatus of Ono together into one to simplify installation and removal of the image sensing and transmission devices.

***Allowable Subject Matter***

27. Claims 6, 10-17, 23, 27-34, 40, 42-45, 51 and 55-62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

28. In regard to claims 10, 27, 42 and 55, the prior art does not teach or fairly suggest a system or method wherein a case where an image transmission apparatus

issues the authorization to control said image sensing apparatus after restoring the conditions of said image sensing apparatus to the conditions at the time of the undesired termination.

29. In regard to claims 6, 11-14, 23, 28-31, 40, 43-44, 51 and 56-59, the prior art does not teach or fairly suggest a system or method wherein a case where an image reception apparatus restores communication within a predetermined time after an undesired termination and another image reception apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication, said image transmission apparatus suspends the authorization issued to the other image reception apparatus and issues authorization to control said image sensing apparatus to said restored image reception apparatus.

30. In regard to claims 15-17, 32-34, 45 and 60-62, the prior art does not teach or fairly suggest a system or method comprising an authorization period administration means for setting a period allowed for said external apparatuses to hold the authorization at the time of restoration of communication after an undesired termination.

### ***Response to Arguments***

31. Applicant's arguments with respect to claims 1-5, 7-9, 18-22, 24-26, 35-39, 41, 46-50, 52-54 and 63-64 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH  
3/10/2004



NGOC-YEN VU  
PRIMARY EXAMINER